

Title (en)

Washer, fastener provided with a washer, method of and power tool for fastening objects

Title (de)

Unterlegscheibe, Befestigungselement mit einer Unterlegscheibe, Verfahren und angetriebenes Werkzeug zum Befestigen von Gegenständen

Title (fr)

Rondelle, élément de fixation comprenant une rondelle, procédé de et une machine-outil pour attacher des objets

Publication

EP 1526294 A3 20050601 (EN)

Application

EP 04256518 A 20041022

Priority

US 69183103 A 20031023

Abstract (en)

[origin: EP1526294A2] A washer (1, 1', 1'') has a body (2, 2', 2'') having an axis (A1) and provided with a first bearing face surface (3, 3', 3'') located at one axial side and adapted to cooperate with a nut (10), a second bearing face surface (4, 4', 4'') located at an opposite axial side and adapted to cooperate with an object (18) and at least one third turning resistant surface (5, 5', 5'') adapted to cooperate with a thread (13) of a bolt (12). The body has at least one resistive point (33, 34; 35, 36; 37, 38) arranged so that when the nut (10) is turned and turns the bolt (12) the body (2, 2', 2'') of the washer stops the bolt (12) from turning and thereby the nut (10) creates a pull on the bolt which elongates the bolt (12) in an axial direction and applies to the body (2, 2', 2'') of the washer an axial force which overcomes the at least one resistive point (33, 34; 35, 36; 37, 38) so that a portion (7, 7', 7'') of the body (2, 2', 2'') of the washer (1, 1', 1'') is allowed to be pulled axially when the bolt (12) elongates. Also, a fastener with the washer is provided, as well as a method of and a tool for fastening objects with the use of the washer. <IMAGE>

IPC 1-7

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IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

- [X] EP 1318316 A2 20030611 - JUNKERS JOHN K [US]
- [X] EP 1348878 A1 20031001 - JUNKERS JOHN K [US]
- [A] EP 1058014 A1 20001206 - RENAULT [FR]

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